

In the Claims

Please enter the amendments as shown below. Additions and deletions are indicated by underlining and double-brackets, respectively.

1- 44. (Canceled)

45. (Currently amended) A method of boosting the immune system in a subject having an immune system deficiency associated with a tumor or cancer, the method comprising administering, to a subject having an immune system deficiency associated with a tumor or cancer, an immunostimulatory nucleic acid molecule having at least one unmethylated CpG dinucleotide and comprising a nucleotide sequence selected from the group consisting of 5'-purine-purine-cytosine-guanine-pyrimidine-pyrimidine-3'; 5'-purine-TCG-pyrimidine-pyrimidine-3'; and a nucleotide sequence comprising one or more 5'-TCG-3' sequences, wherein the immunostimulatory nucleic acid is longer than 8 nucleotides and is non-palindromic, and wherein the immunostimulatory nucleic acid molecule is in association with a targeting means, and wherein said association is selected from the group consisting of an ionic bond and a covalent bond.

46. (Previously presented) The method of claim 45, further comprising administering an antigen associated with a disease selected from the group consisting of a tumor, cancer, a bacterial infection, a viral infection, and a fungal infection.

47-93. (Canceled)

94. (Currently amended) The method of claim [[47]] 45, wherein the targeting means is a molecule that binds to a target cell.

95. (Previously presented) The method of claim 94, wherein the target cell is selected from the group consisting of a B-cell, and a natural killer cell.

96. (Currently amended) The method of claim [[47]] 45, wherein the targeting means is selected from the group consisting of a sterol, a lipid and a target cell specific binding agent.

97. (Previously presented) The method of claim 96, wherein the lipid is selected from the group consisting of a cationic lipid a virosome, and a liposome.

98. (Previously presented) The method of claim 96, wherein the target cell specific binding agent is a ligand recognized by a target cell specific receptor.

99. (Currently amended) The method of claim [[47]] 45, wherein said immunostimulatory nucleic acid molecule is administered orally.

100. (Currently amended) The method of claim [[47]] 45, wherein said immunostimulatory nucleic acid molecule is injected.